XMP-2200/2300/2400 User's Manual

Notes about model variants

The XMP-2300 and XMP-2400 models are based on XMP-2200 with the following differences:

XMP-2200

Ethernet only
1 AV-out

XMP-2300

Ethernet + Wi-Fi
1 AV-out

XMP-2400

Ethernet + Wi-Fi
1 AV-out + 1 AV-in
+ 1 Component-in

Wireless operations apply to XMP-2300 and XMP-2400.
AV inputs apply to XMP-2400 only.
All other aspects of operation are identical for each model.

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1. Introduction

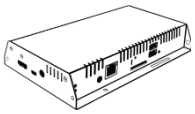
This document describes the hardware and software operations of the XMP-2200/2300/2400 system set up, and frequently asked questions.

1.1. Features

The XMP-2200/2300/2400 is a HD 720p high definition digital signage player featuring industrial grade mechanical design and versatile open-standard HTML5 and SMIL programmability.

- Support for HTML5 widgets for dynamic content (W3C Widgets standard)
- HD 720p hardware decoding of MPEG1/2/4, H.264, and VC-1 media formats
- 4GB on-board flash local storage with SD card slot
- Integrated audio and video output via HDMI
- Supports full POPAI Screen Media Formats Standards profiles S1 to S12, and E1 to E8
- Multiple 3rd party software solution compatibility
- Industry leading W3C SMIL support for developers
- (XMP-2300/2400) Built-in wireless b/g/n network
- (XMP-2400) Composite AV input and Component input

1.2. Package contents



Media Player Unit

AC Adapter

Ethernet cable

Standard 3.5mm to RCA AV adapter

Standard 3.5mm to component adapter (XMP-2400 only)

RS-232 adapter (XMP-2400 only)

Wi-Fi Antenna (XMP-2300/2400)

SD card cover (pre-installed on unit)

Quick Start Guide

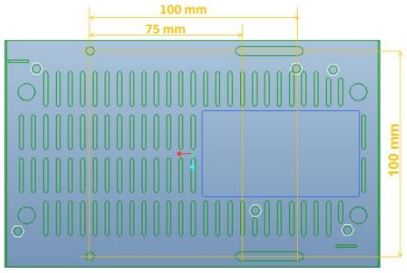
Documentation CD (select SKUs)

Software set up guide (select SKUs)

NOT INCLUDED: A USB mouse is required for system setup

1.3. Mounting options

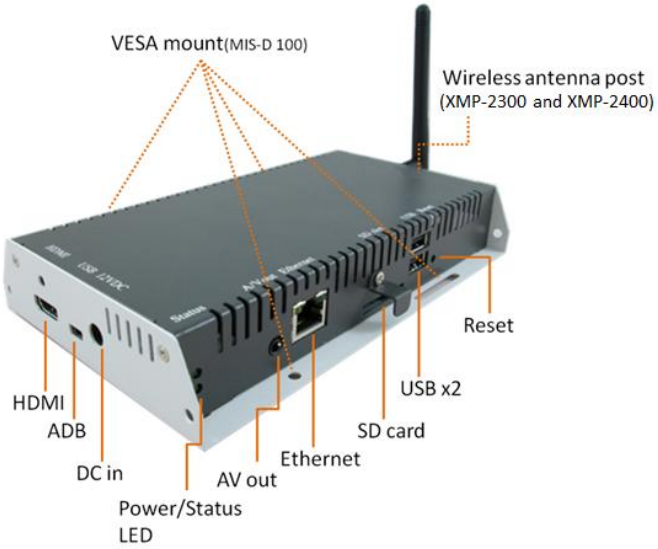
The player can be attached to mounting posts on the back of screens or inside cabinetry with the built in VESA MIS-D100 (100mmx100mm) compatible mounting flange.



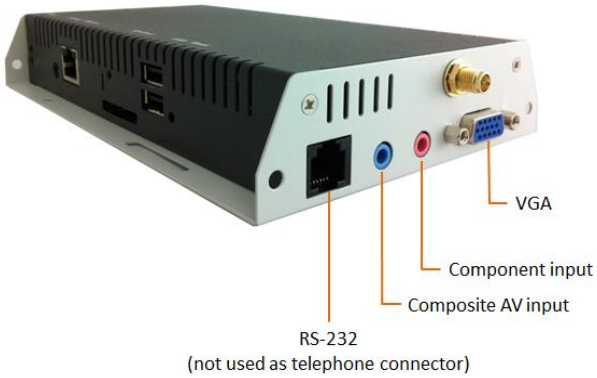
(for XMP-2300 and XMP-2400)

ATTACH the wireless antenna as shown below, and then screw antenna clockwise onto the post.

1.4. Physical view



XMP-2200/2300/2400



XMP-2400 only

Physical features (left to right in above illustration)

- HDMI 1.3a connector for digital video and audio combined output
- ADB , Android debug console port
- 12V DC for power adapter
- Power and Status LED indicator
- 3.5mm composite AV output
- Ethernet port for network content update
- SD card slot with SD card cover
- USB ports for USB content update and configuration
- S/W Reset button to perform factory reset
- Wireless antenna post (XMP-2300/2400)
- RS-232 port (not used as telephone connector, XMP-2400 only)
- Composite AV input (XMP-2400 only)
- Component input (XMP-2400 only)
- VGA port for analog video output (XMP-2400 only)

2. Configuring the XMP-2200/2300/2400 Media Player

2.1. System connections

1 Attach a HDMI cable to your monitor

When using an **HDMI connection,** audio is sent along with video over the HDMI cable, so no additional cables are required.

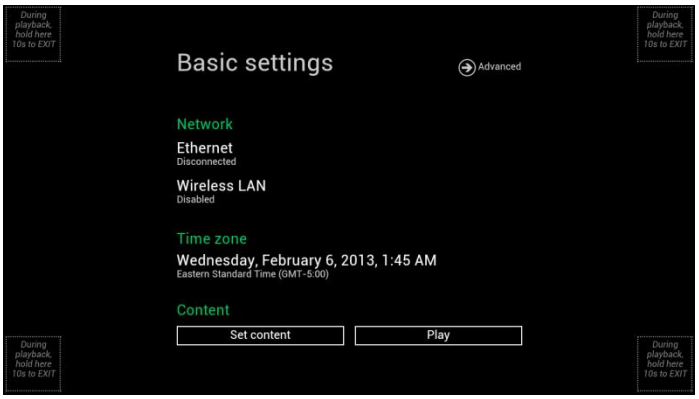
2 Attach the AC power adapter to power on the unit. After approximately ***40 seconds*** booting animation will be displayed on screen as shown below :

3 Player boot process takes approximately ***75 seconds*** to complete.

Troubleshooting Tips

1 The operation indicators light up, but no video is displayed on screen
- Ensure that your video cable (HDMI) is securely connected. When using an HDMI connection, choose high quality, certified HDMI cables or try using shorter length cables
- Check if your monitor is turned-on and switched to the corresponding video input source

2 No sound is heard
- Check volume (mute) settings on monitor
- If using VGA connection, you also need to connect RCA audio cables (XMP-2400 only)



After boot up complete, player will stay in basic settings menu if no content service has been configured (i.e. first boot up for brand new unit or after a factory reset). Plug in a USB mouse to start configuring the player.

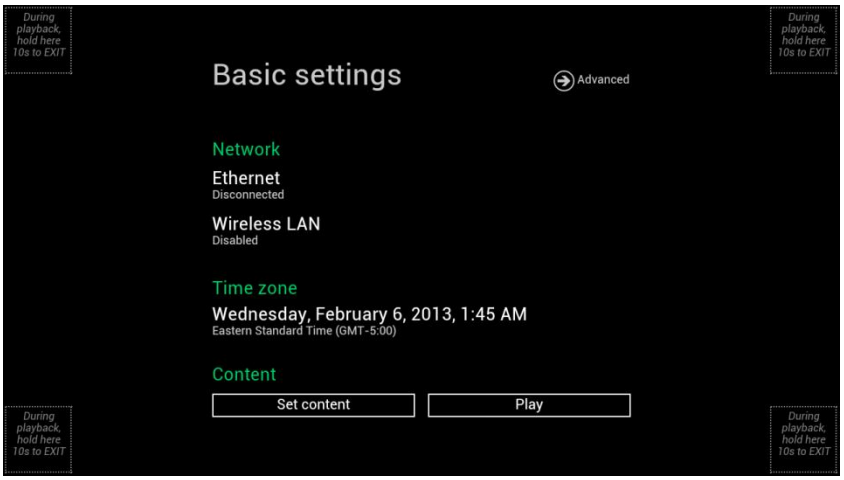
If you have already set content into the player, contents will play back automatically after 15 seconds after boot up.

To enter the menu system at any time during playback, plug in a USB mouse and hold the left mouse key in the corner area as shown below for 10 seconds.

*Player will ask for password if password is pre-configured.

2.2. Basic settings

You must attach a USB mouse to the player to configure settings.



(Fig. 2.2.1)

Basic settings allow user to configure the 3 important settings to signage application

– Network, Time zone and Content.

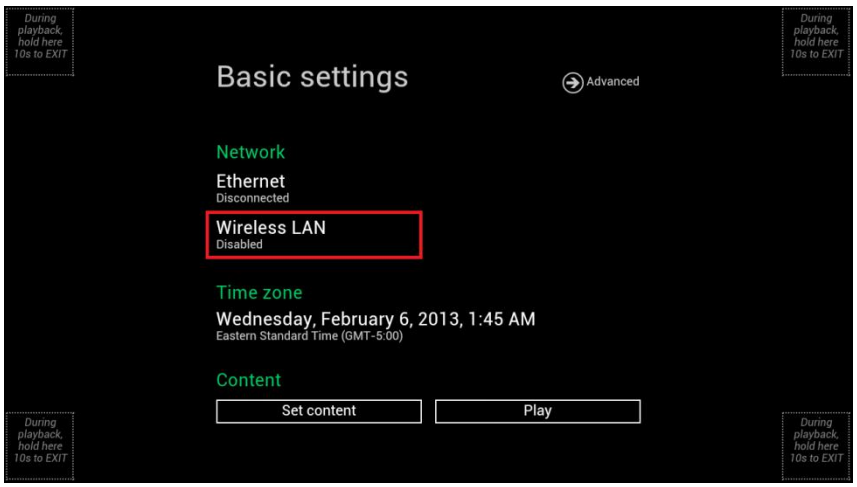
Each time user enter Basic settings menu, player will start playback automatically after 15 seconds if user already set content services previously. Auto playback can be canceled by click on the button while it's counting down.

User is able to enter Advanced Setting menu by clicking the Advanced button.

2.3. Connect the XMP-2200/2300/2400 to your network

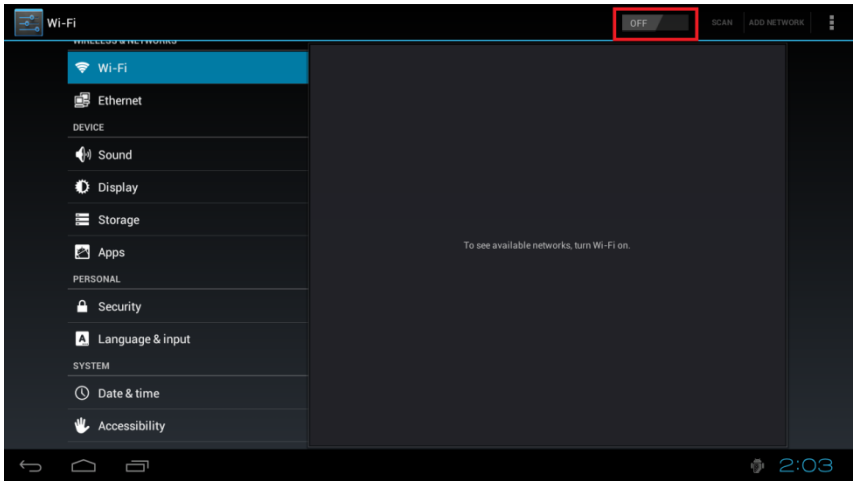
Wireless connection (XMP-2300, XMP-2400)

1 Click the **Wireless LAN** setting, the wireless configuration UI will be launched.



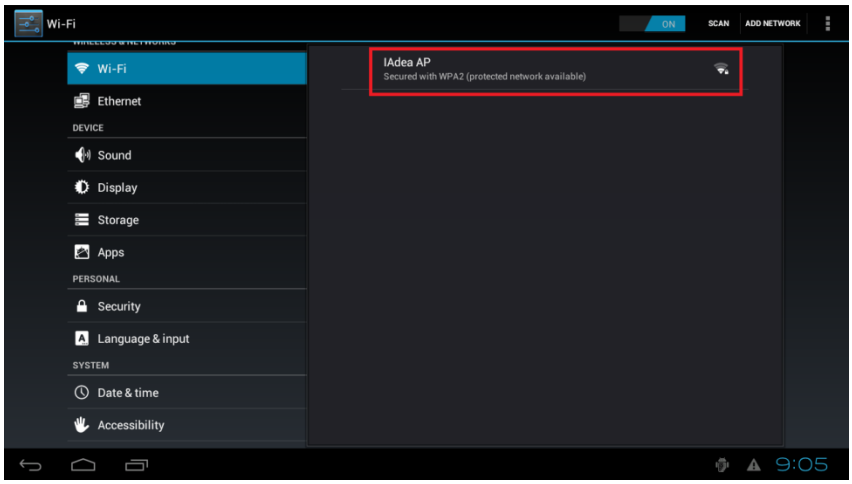
(Fig. 2.3.1)

2 Click the **ON/OFF** button as indicated below to turn ON Wireless interface (Ethernet will be disconnected when player connects to wireless network).



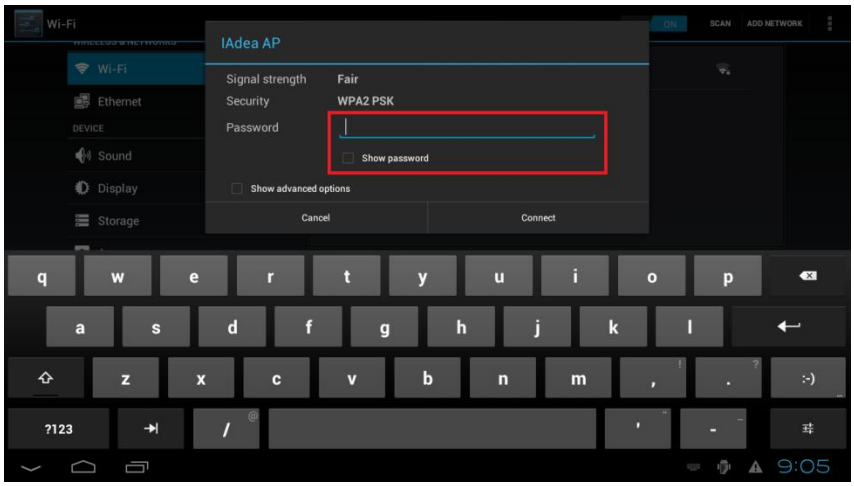
(Fig. 2.3.2)

3 The player will scan for wireless signals nearby and available AP stations will be listed.



(Fig. 2.3.3)

4 Click on the station name to connect. If the network requires authentication, you will be asked to provide the password for access.



(Fig. 2.3.4)

Wired connection

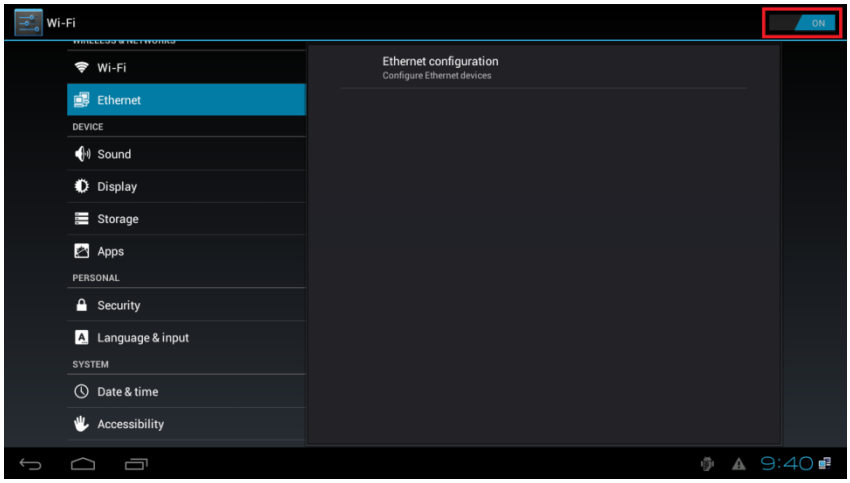
To use the wired Ethernet connection, connect an Ethernet cable and disable the Wireless LAN interface first

1 Click the **Wireless LAN** setting, the wireless configuration UI will be launched. (Fig. 2.3.1)

2 Click the **ON/OFF** button as indicated below to turn OFF Wireless interface. (Fig. 2.3.2)

DHCP – automatically assign network IP address

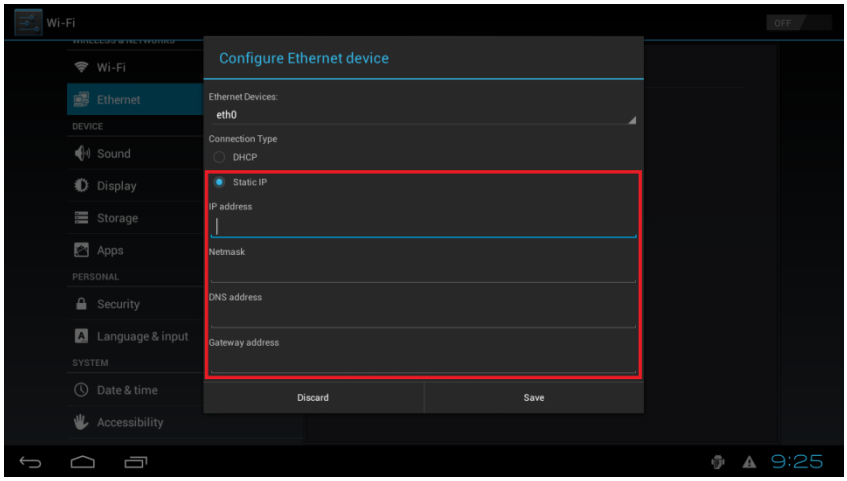
3 Turn on Ethernet interface. For DHCP environment, configuration is finished in this step.



(Fig. 2.3.5)

Static IP – manually assign network IP address

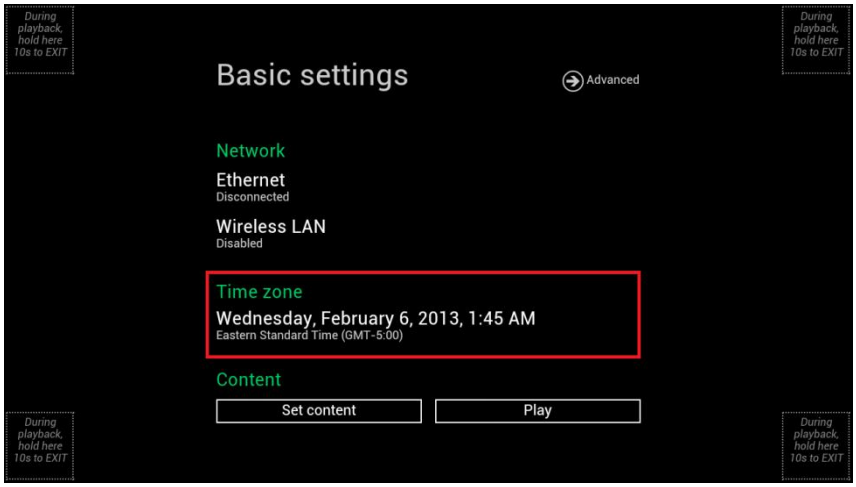
4 Click the **Ethernet** to make static IP configuration.



(Fig. 2.3.6)

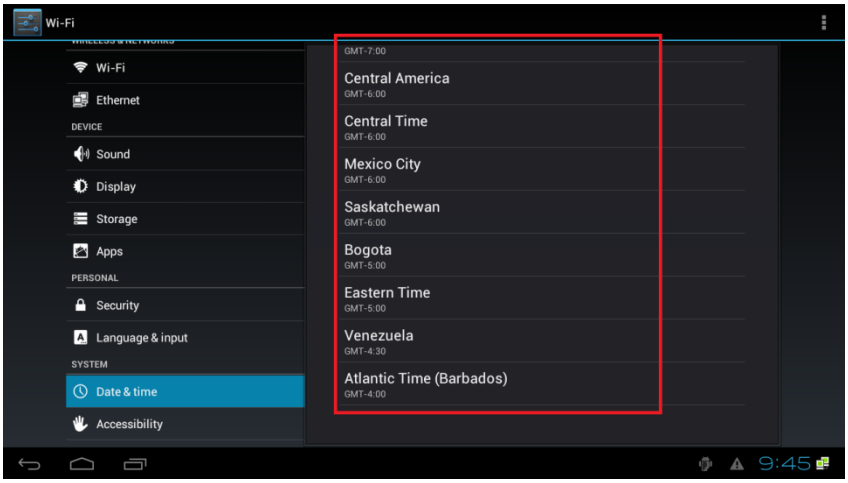
2.4. Time zone settings

1 Click the **Time zone** , configuration menu will be launched.



(Fig. 2.4.1)

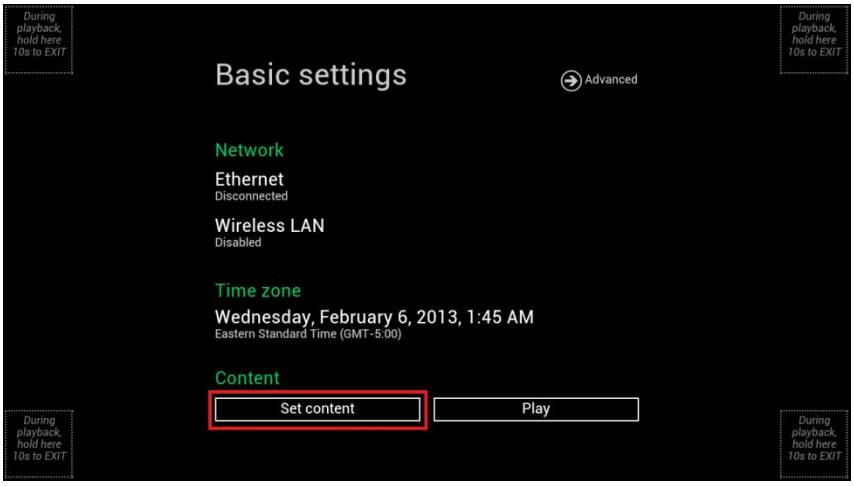
2 Choose the correct time zone from available options.



(Fig. 2.4.2)

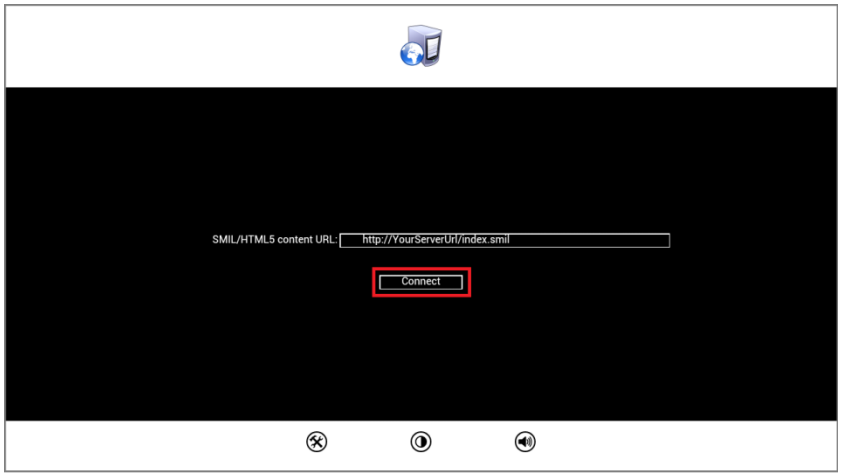
2.5. Content settings

1 Click the **Set content** button, configuration menu will be launched.



(Fig. 2.5.1)

2 **Input** the content source URL and click Connect button, player will start playback immediately.

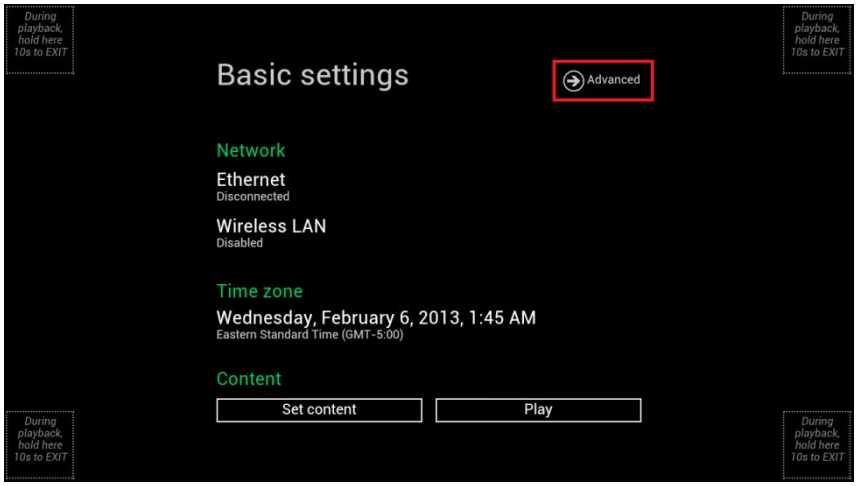


(Fig. 2.5.2)

2.6. Player Information

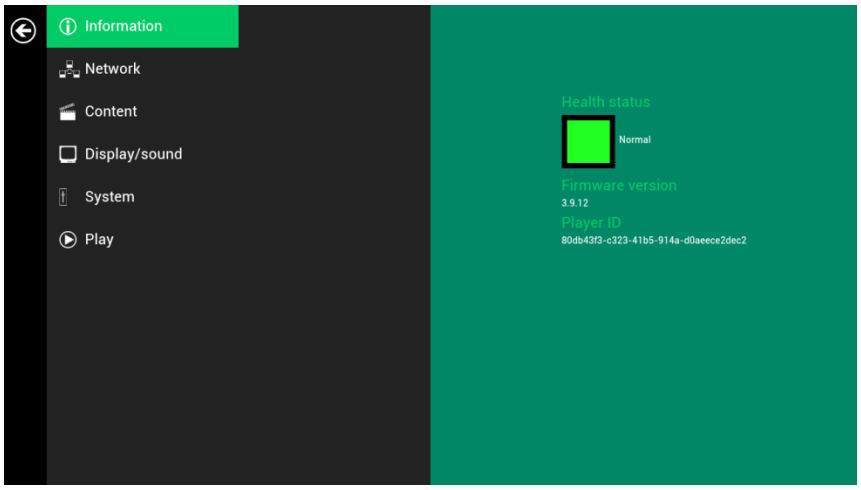
User can check the player's basic information including the Health status; Firmware version; and Player ID.

1 Click the **Advanced** button, advanced configuration menu will be launched.



(Fig. 2.6.1)

2 Click on **Information**. The definitions of the Health Status:
Green – Normal. The device connects to the URL server of the content source normally.
Blue – Local. The device plays the contents from the USB drive or SD card.
Gray – Disconnected. The device is in the disconnection state.



(Fig. 2.6.2)

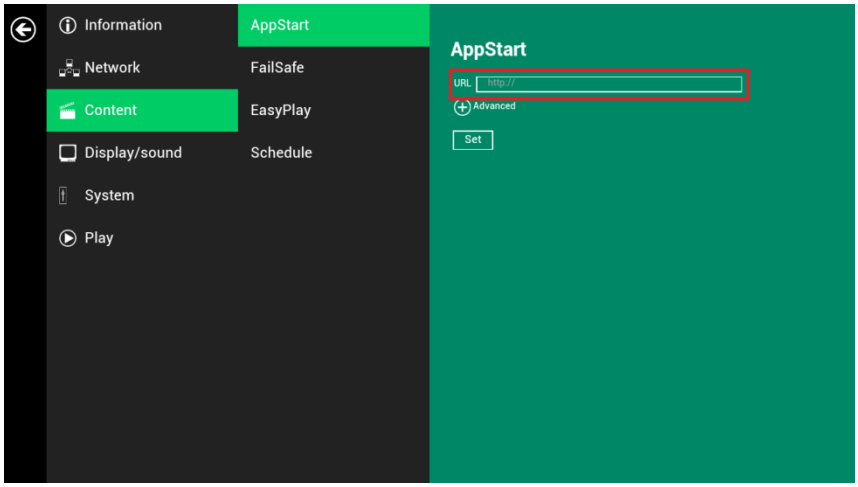
2.7. Content configuration – AppStart

User can assign the URL and APP for execution after the system start up.

1 Click the **Advanced** button, advanced configuration menu will be launched. (Fig. 2.6.1)

2 Click on **Content**, and then click on AppStart.

3 Enter the valid URL of HTML/SMIL in AppStart.
The Advanced option is used for the 3rd-party App configuration only.

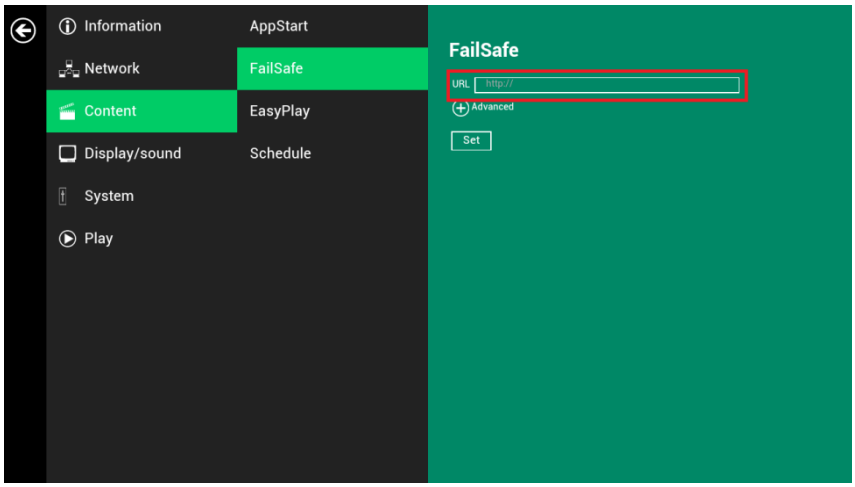


(Fig. 2.7.1)

2.8. Content configuration – FailSafe

User can assign the URL and APP for execution while the system is failed to play the assigned content.

1. Click the **Advanced** button, advanced configuration menu will be launched. (Fig. 2.6.1)
2. Click on **Content**, and then click on FailSafe.
3. Enter the URL of HTML/SMIL in FailSafe.
4. The Advanced option is used for the 3rd-party App configuration only.



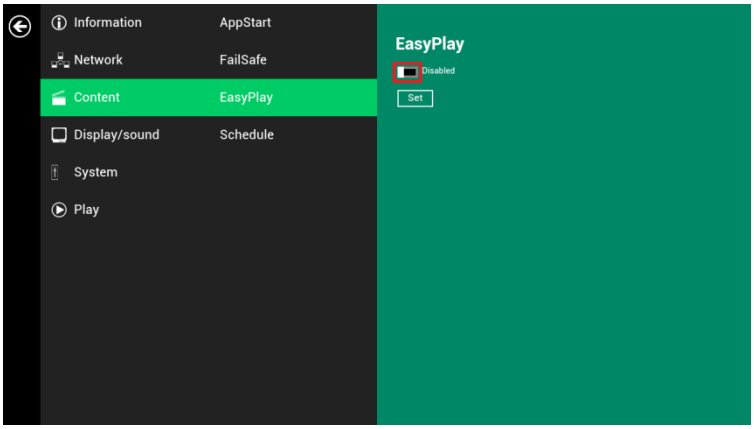
(Fig. 2.8.1)

2.9. Content configuration – EasyPlay

The feature EasyPlay allows the player to play the media contents from the USB flash drive (or SD card) directly.

When EasyPlay is enabled, the player will play the contents from the USB drive (or SD card) only. If user wants to play the contents from the URL server configured via 'Set content', EasyPlay must be disabled.

1. Click the **Advanced** button, advanced configuration menu will be launched. (Fig. 2.6.1)
2. Click on **Content**, and then click on **EasyPlay**.
3. Click **Disabled/Enabled** button to enable EasyPlay , and choose from 2 available operation modes, Photo Mode and Movie Mode.

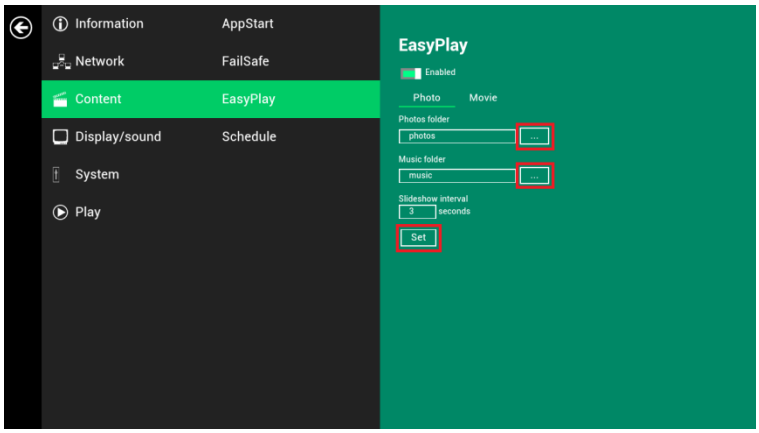


(Fig. 2.9.1)

Configure Photo Mode

4 Click on Photo for choosing photos and music. Click on the button as marked in red below, and select the photos/music directory from the USB drive.

5 Click **Set** button after the folders are selected.



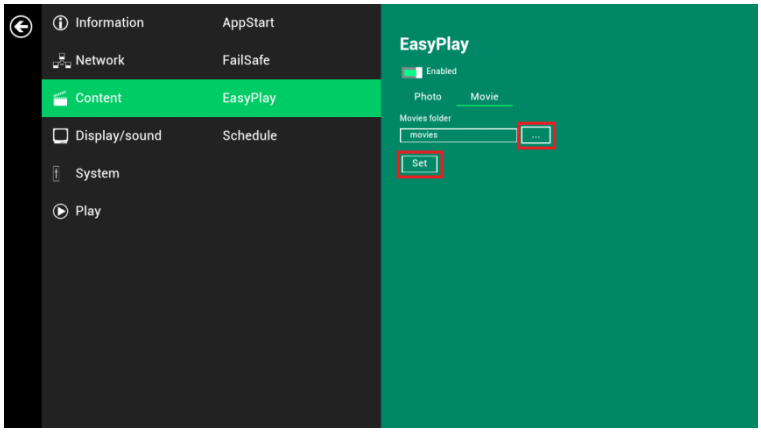
(Fig. 2.9.2)

Configure Movie Mode

6 Click on **Movie** for choosing movies. Click on the button as marked in red below, and select the movie directory from the USB drive.

7 Click **Set** button after the folder is selected.

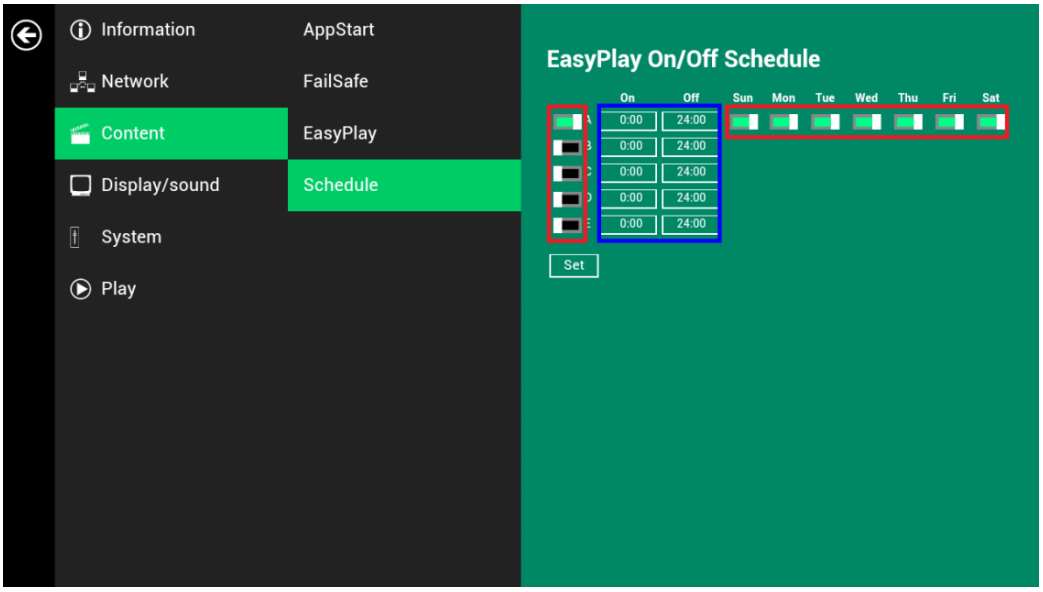
8 The files in the selected folders will be played while clicking on the Play button in the Basic settings or Advanced configuration menu.



(Fig. 2.9.3)

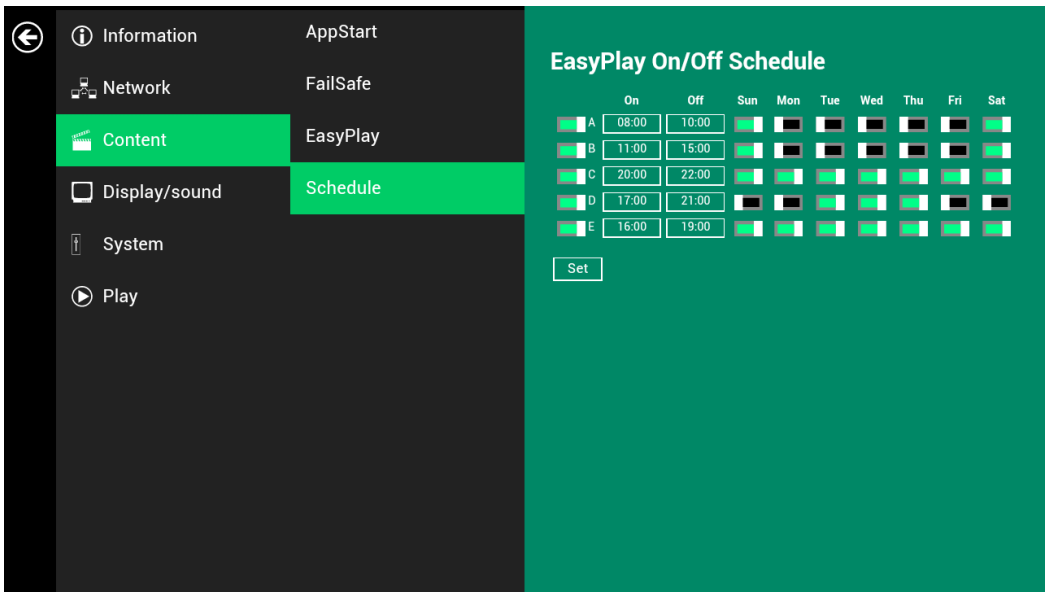
EasyPlay Schedule configuration

1. Click the Advanced button, advanced configuration menu will be launched. (Fig. 2.6.1)
2. Click on **Content**, and then click on **Schedule**.
3. Click on the buttons marked in red below to enable/disable the EasyPlay schedule for each time slots. Type the scheduled time in the dialogue boxes marked in blue below by using the pop-up keyboard or the USB keyboard.



(Fig. 2.9.4)

4. The "On" times assigned in the time slots A-E are **inclusive**. For example a schedule assigned as the figure below,



(Fig. 2.9.5)

The exact playback time will be the time slots marked in Blue as shown in figure 2.9.6. The dark blue parts are the overlap time of C/D and D/E.

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
00:00							
01:00							
02:00							
03:00							
04:00							
05:00							
06:00							
07:00							
08:00							
09:00							
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15:00							
16:00							
17:00							
18:00							
19:00							
20:00							
21:00							
22:00							
23:00							

(Fig. 2.9.6)

2.10. Display settings

Output Mode

For best quality, set the output resolution to match your display's native resolution to avoid image scaling and blur.

If you are connecting a LCD computer monitor, projector, or plasma display, refer to the device specifications for the best matching setting.

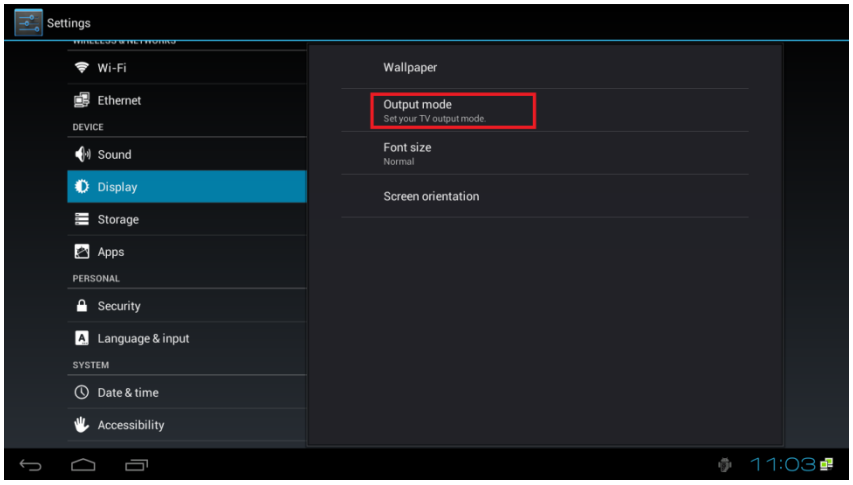
If you are connecting to composite input only monitor, such as legacy CRT TV, output resolution need must change to Composite: NTSC or Composite: PAL from here.

1 Click the **Advanced** button, advanced configuration menu will be launched. (Fig. 2.6.1)

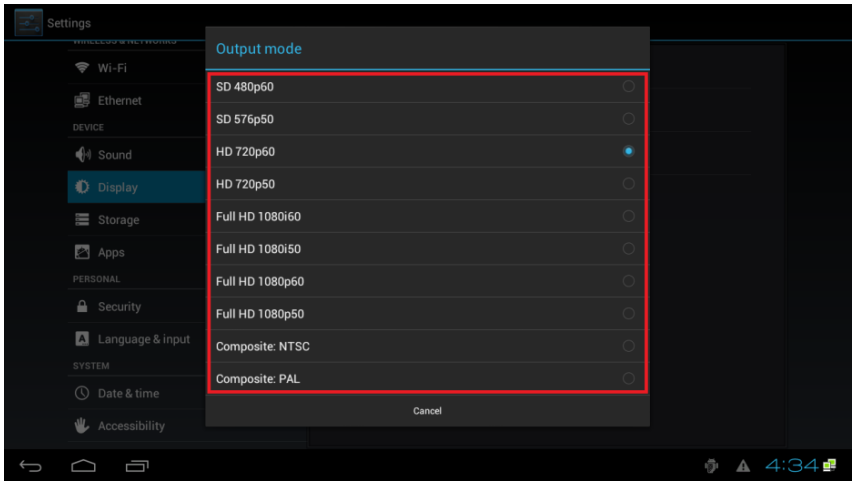
2 Click the **Display/sound** button, and then click on **Display**. The Display Settings page will be launched.

(Fig. 2.10.1)

3 Click on **Output mode**. Select Output mode from the popup menu.



(Fig. 2.10.2)



(Fig. 2.10.3)

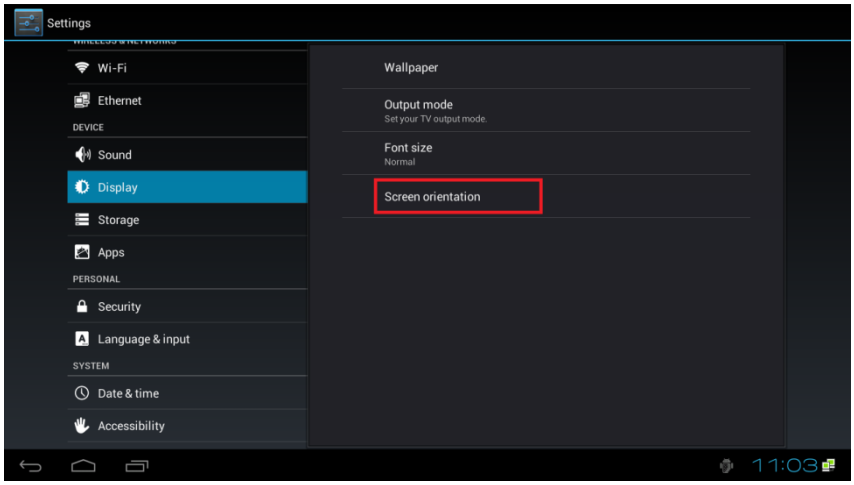
Screen orientation

Screen orientation is to set the display to rotate 90/180/270 degrees.

1 Click the **Advanced** button, advanced configuration menu will be launched. (Fig. 2.6.1)

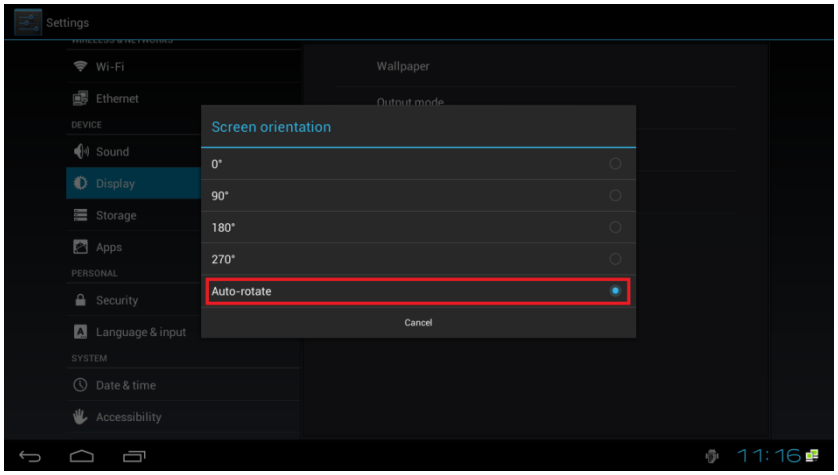
2 Click the **Display/sound** button, and then click on **Display**. The Display Settings page will be launched. (Fig. 2.10.1)

3 Click on the **Screen orientation** marked in red below.



(Fig. 2.10.4)

4 Click on the preferred angle from the menu. The option “Auto-rotate” allows the display to rotate along with the signboard automatically.

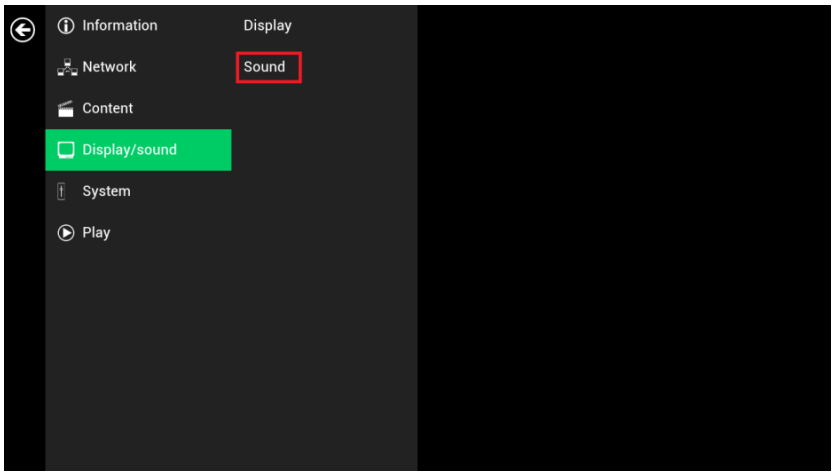


(Fig. 2.10.5)

2.11. Sound settings

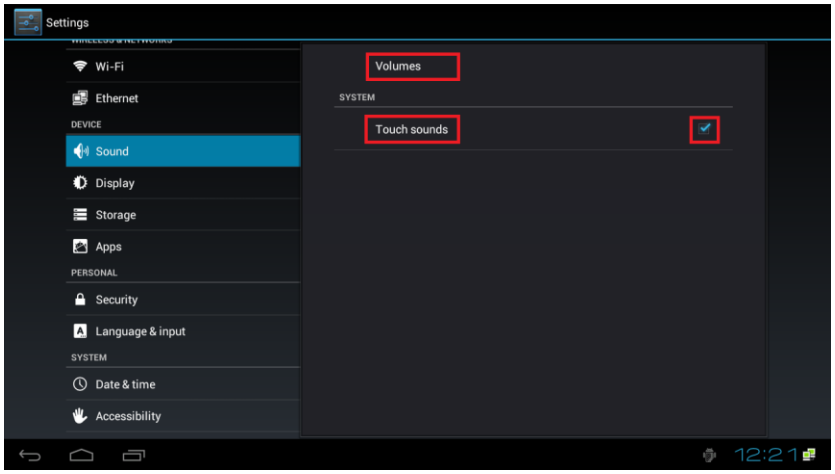
To control the output sound volumes and touch sounds.

1. Click the **Advanced** button, advanced configuration menu will be launched. (Fig. 2.6.1)
2. Click the **Display/sound** button, and then click on **Sound**. The Sound Settings page will be launched.

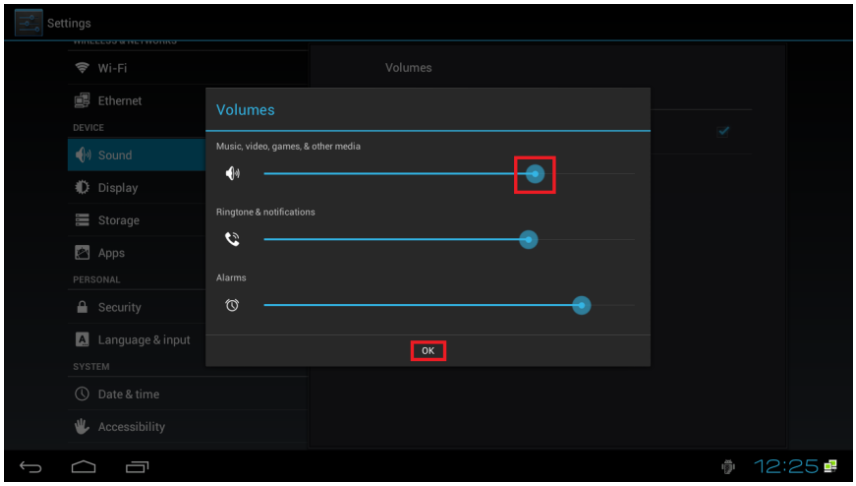


(Fig. 2.11.1)

3. Click on **Volumes**, the Volumes settings page will be launched. Drag the blue dots to adjust the volumes for the selected item, and then click on OK to save the new settings. (Fig. 2.11.3)
4. Click on the icon on the right as marked in red to enable/disable the Touch sounds. (Fig. 2.11.2)



(Fig. 2.11.2)

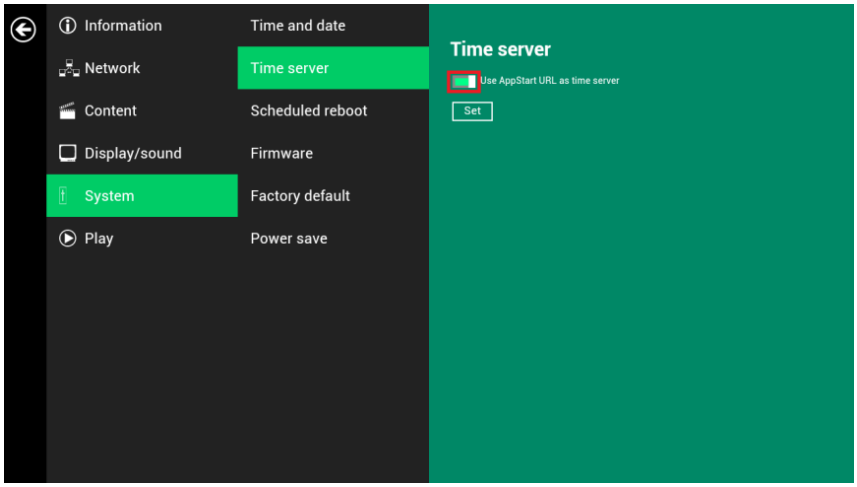


(Fig. 2.11.3)

2.12. System configuration – Time Server

The feature allows user to choose the player's time synchronization source. When it's enabled, the player synchronizes with the time of AppStart URL. Otherwise, the player synchronizes with Android default time server.

1. Click the **Advanced** button, advanced configuration menu will be launched. (Fig. 2.6.1)
2. Click on **System**, and click on **Time Server**.
3. Click the **Use AppStart URL as time server** button as marked in red below to enable/disable the time server function.
4. Click on **Set** to save the setting.

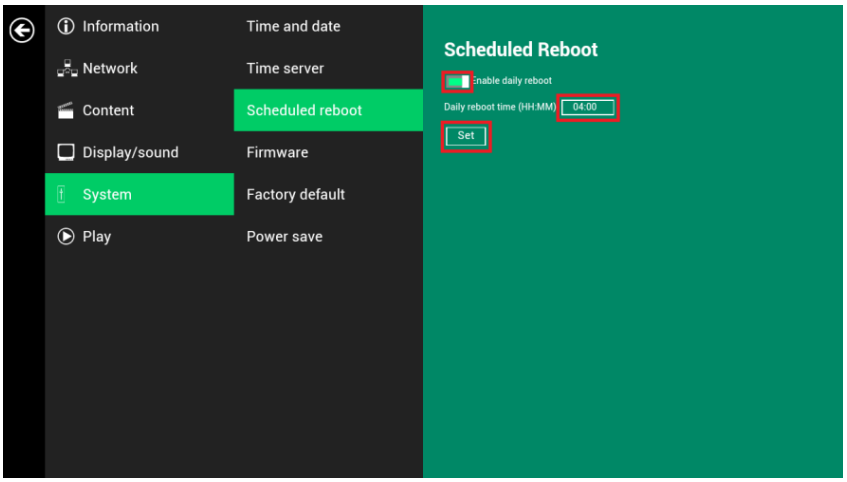


(Fig. 2.12.1)

2.13. System configuration – Scheduled reboot

The feature Scheduled Reboot allows the player to reboot on the assigned time automatically every day.

1. Click the **Advanced** button, advanced configuration menu will be launched. (Fig. 2.6.1)
2. Click on **System**, and click on **Scheduled Reboot**.
3. Click the **Enable daily reboot** button as marked in red below to enable/disable the daily reboot function. Click on the dialogue box to set the time. The value can be input by using the pop-up keyboard or the USB keyboard.
4. Click on **Set** to save the setting.



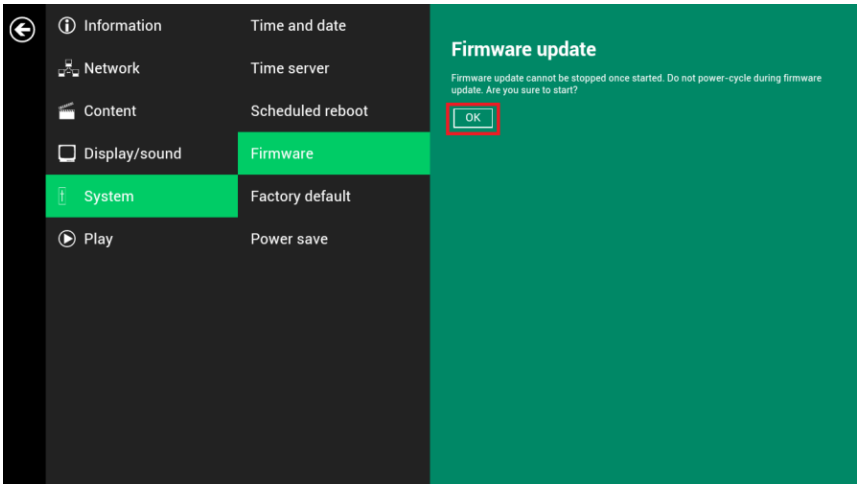
(Fig. 2.13.1)

2.14. System configuration - Firmware upgrades

Firmware updates can be performed by using a USB flash drive. Please read the release notes carefully regarding the changes that will be made to your player before applying the upgrade.

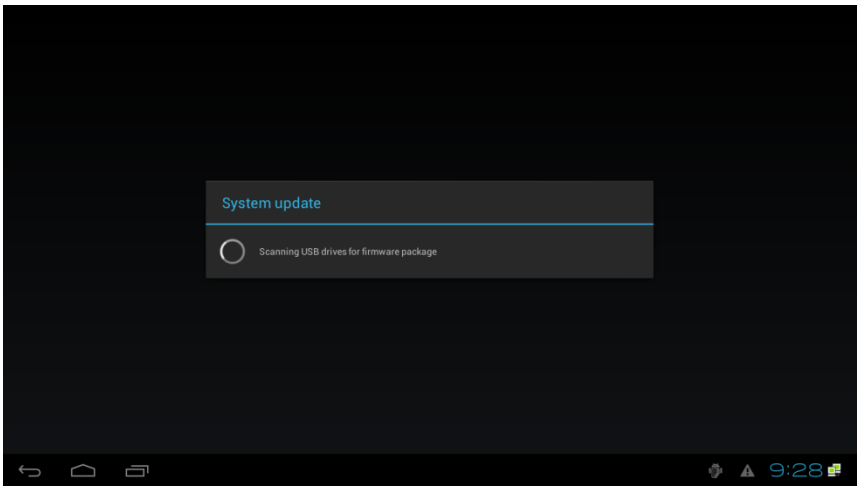
IMPORTANT: DO NOT unplug the USB drive or power down the player while the system is performing the firmware update.

1. Download the latest firmware and copy it to the root directory of a USB drive from http://support.iadea.com
2. Plug in the power cord into the device.
3. Plug in a USB mouse to the device to enter Basic settings menu.
4. Click the **Advanced** button, advanced configuration menu will be launched. (Fig. 2.6.1)
5. Click on **System**, and choose **Firmware**.
6. Click on **OK** for proceeding to the firmware update process.



(Fig. 2.14.1)

7. Plug in the USB drive while the screen shows “Scanning USB drives for firmware package”.



(Fig. 2.14.2)

2.15. System configuration - Factory reset

If you forget a system password you have set, you must reset the system to regain access to the player.

Using the reset button

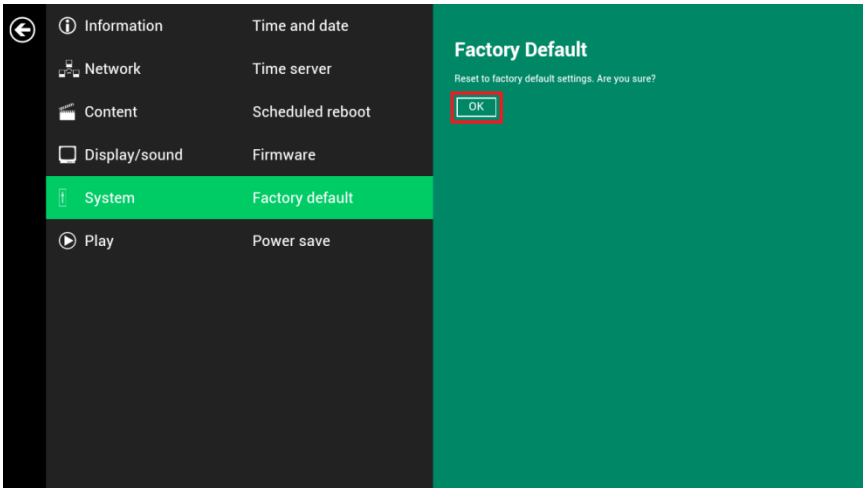
1. **PRESS** and **HOLD** the reset button with a pin.
2. **RE-CONNECT** the power cord.
3. **WAIT** about 10 seconds or until the status LED flashes.
4. **RELEASE** reset button and wait for system to initialize.

Reset button

Using a USB mouse

System reset will re-initialize the system, clear passwords, and return settings to their default values. Perform the following:

1. **CONNECT** a USB mouse.
2. Click the **Advanced** button, advanced configuration menu will be launched. (Fig. 2.6.1)
3. Click on **System** configuration, and choose **Factory default.**
4. Click on **OK** button to do the reset.



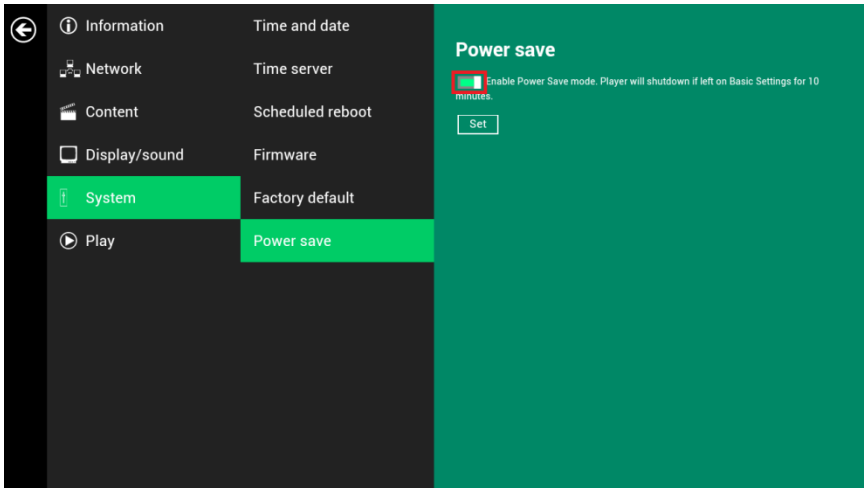
(Fig. 2.15.1)

2.16. System configuration – Power save

The feature Power save allows the player to power off automatically while idle in the Basic settings page without any action for 10 minutes.

1 Click the **Advanced** button, advanced configuration menu will be launched. (Fig. 2.6.1)

2 Click on **System**, and click on **Power save**.



(Fig. 2.16.1)

3. Content Management

The XMP-2200/2300/2400 is designed to work with 3rd party management solutions. Please refer to the printed guide for related set up instructions.

4. Authoring in HTML5

A major advancement in the XMP-2200/2300/2400 media appliance is the ability to playback HTML5 content which can contain dynamic information.

To find out more about using HTML5 for digital signage, visit http://widget.iadea.com.

5. Working with SMIL

The XMP-2200/2300/2400 uses open communications protocols for content presentation and playback control. SMIL-compliance means predictable results across multiple devices, and SMIL's non-proprietary nature means that your investments are never obsolete.

5.1. Introduction

Using SMIL (pronounced "smile"), the language created by W3C for multimedia communications, the media player understands the language "spoken" by professional tools from companies such as Adobe, Apple, Microsoft, and Real Networks. What this means is quicker, easier, and better integration of your players into your digital signage networks, opening up avenues of software controls and realizing the full potential of your player hardware down the road.

5.2. www.a-smil.org for developers

The media player operating system utilizes W3C SMIL as the underlying scripting language, which lends well to customization to your project management needs. For resources, downloads, and community support, please visit www.a-smil.org.

6. Technical Data

6.1. Specifications

	XMP-2200	XMP-2300	XMP-2400
Video format support	POPAI Screen Media Standards S6 (MPEG-1 SIF, 3Mbps CBR) S7 (MPEG-1 480p, 10Mbps CBR) S8 (MPEG-1 720p, 15Mbps CBR) S9 (MPEG-2 480p, 6Mbps CBR) S10 (MPEG-2 720p, 12Mbps CBR) S11 (MPEG-4 AVC, 480p, 6Mbps CBR) S12 (MPEG-4 AVC, 720p, 10Mbps CBR) E4 (VC-1/WMV9, MP@ML, 720p) E7 (MPEG-4 ASP, 480p, 10Mbps CBR) E8 (MPEG-4 AVC, 1080p, 10Mbps CBR)		
Image format support	POPAI Screen Media Standards S1 (JPEG 480p baseline) S2 (JPEG 720p baseline) S3 (JPEG 1080p baseline) E1 (PNG 24bpp+alpha, 480p) E2 (PNG 24bpp+alpha, 720p) E3 (PNG 24bpp+alpha, 1080p)		
Audio codec support	POPAI Screen Media Standards S4 (MPEG L2 audio) S5 (MP3 audio, 320Kbps)		
Dynamic content	W3C HTML5 (HTML, CSS, JavaScript) W3C SMIL 3.0 instructions (sub-set)		
Physical I/O connectors	HDMI 1.3a 3.5mm AV out RJ45 Ethernet USB 2.0	As XMP-2200 plus: Wi-Fi antenna port	As XMP-2200 plus: Wi-Fi antenna port RS-232 port 3.5mm composite in 3.5mm component in
Local storage	4GB on-board flash memory (up to 1.8 hrs of 5 Mbps high def. video) SD card expansion slot		
Accessories	3.5mm-RCA AV cable Ethernet cable	As XMP-2200 plus: Wi-Fi antenna	As XMP-2200 plus: Wi-Fi antenna RS-232 adapter 3.5mm-RCA AV cable 3.5mm-Component cable
Power requirement	12V 1.5A DC		
Power consumption*	9.6 watts max		
Environmental	Operating temperature: 0 – 40° C / 32 – 104° F Humidity: 5 – 85% @ 40° C / 32 – 104° F non-condensing		
Dimensions	183 x 115 x 29mm (7.3 X 4.5 X 1.1 inches)		
Weight	0.70kg 1.54lbs		
Safety	UL-approved AC adapters		
Certifications	CE/FCC		
Warranty	One-year limited parts & labor		

7. Appendix: FAQ

What video format can I play?

Video files encoded in MPEG-4 AVC up to 1920x1080 resolutions and 10Mbps bitrates should play perfectly. If a certain video is not played as scheduled, or if it plays poorly, please search the support site for "transcode" instructions.

The signboard is placed near my Wi-Fi access point, yet the connection is unreliable.

Wi-Fi appliances in general should be placed 10 feet (3 meters) from the Wi-Fi access point for reliable operation. Try relocating the access point further away from the signboards to improve connection.

What can I do about the gap between video and video?

*V*ideo gaps (blank screen) occur before and after each video are played. To minimize the gap, avoid back to back video programming by scheduling an image between each video.

If both Ethernet & WiFi are connected, which one will take precedence?

If both connections are available, WiFi will be used.

What is the maximum file size for a single video file?

The maximum video file size for the XMP-2200/2300/2400 is 2GB. We recommend reserving a safety margin to avoid exceeding the limit (i.e. limiting files to 1850MB).

What should I do if I forgot my password?

In this case, please perform a factory reset.

Use the S/W RESET button located at the back of the media player to restore factory settings. This will also clear the player's password.

How do I manage the playback of contents?

The media appliance is designed to be interoperable with leading 3rd party management software solutions or via SMIL open standard commands.

Could the player display Flash or Microsoft PowerPoint presentations?

The player features limited PowerPoint support, but not Flash support.

While PCs can play many formats with varying degrees of success, RISC-based media players are designed to reliably play specific video formats (Please see spec for details). While Microsoft PowerPoint native files could not play directly on a RISC-based player, the file is converted through other software (i.e. Adfotain Manager Express) into an image format to be played as an image slideshow.

Why won't some media files play properly?

The video data bit-rate used may have exceeded the recommended bit rate.

The video data bit-rate is the amount of video or audio data used per second to store or play the contents, usually expressed in Mbps (mega-bits per second). Video encoded with excessive bit-rates will not playback smoothly in the media player, likely due to storage i/o bottleneck.

Visit http://support.iadea.com for compatible media format presets.

The media playback looks different on a PC compared to the media player's screen. (Wrong aspect ratio)

There are 2 major aspect ratios (width-to-height ratios) for video content, but many kinds of displays. If you play 4:3 video on a 16:9 display (or vice versa), a circle becomes oval, and the picture takes on a squeezed or stretched look. To avoid this distorted look, adding black bars are a common technique.

The Network Media Player can be configured to automatically add black bars for certain types of displays. You can set the output resolution in XMP-2200's configuration menu to match the **native resolution** of your display.

Some JPEG images cannot be played in the media player.

Progressive JPEG are not supported. Please convert to baseline JPEG for maximum compatibility.

JPEG images can be either of 2 types: baseline or progressive compression. Baseline JPEG offers greatest compatibility, while progressive JPEGs are suitable for web site images. Progressive images are downloaded and displayed "progressively," being rendered more clearly as more data is received over the internet. Progressive images are primarily supported on PCs. For media appliances, make sure to save images as baseline JPEG in your photo editor, or resave them as baseline JPEGs using free tools such as IrfanView (http://www.irfanview.com/).

Does the media player support video streaming?

No. IAdea media players play files from local storage and do not support real-time video streaming over the network. This delivers an optimum viewing experience free of playback quality issues such as stuttering, blocking, or blue-screens.

The media player is not playing. What should I do?

Play list errors and scheduling issues are two major causes of playback problems. To determine if the problem is caused by a bad play list, just delete the play list and restart player. The player should loop through all media files, indicating a fault with the play list.

If the playback is scheduled to play at specific time, check to see if the device is set to the right time zone on the world clock. When nothing seems wrong, the time zone setting is often the reason the program is not played.

IAdea Limited Warranty

For Media Player Devices

Applicable to IAdea product models:

- XMP-2200/2300/2400

1. IAdea provides, unless extended through optional service programs, one (1) year of limited warranty on its applicable product models listed above. The applicable product must be purchased through an authorized IAdea reseller. Subject to the conditions of this warranty, IAdea will perform necessary service on the product without charge for parts or labor if, in the opinion of IAdea, the product is found to be faulty within the warranty period. IAdea's sole warranty and obligation will be to repair or replace (at it sole discretion) such products that require warranty during the applicable warranty period in accordance with these conditions. If the product is found to be in correct working order, then IAdea reserves the right to charge you for its time and materials costs.
2. This warranty only applies if the product has been under normal use and reasonable care (in the opinion of IAdea). The warranty covers normal usage for which the unit was originally supplied and does not cover damage, malfunction or failure resulting from use of incorrect voltages, unauthorized installation, accident, misuse, neglect, build-up of dirt or dust, abuse, power surge problems, thunderstorm activity, tampering or repair by unauthorized persons (including unauthorized alterations), unauthorized maintenance, exposure to abnormally corrosive conditions or any foreign object or matter having entered the product.
3. If warranty service is required you should contact IAdea at support@IAdea.com. You will be required to fill out an RMA form and provide proof for your original date of purchase.
4. You will be responsible for shipping the product to designated IAdea service locations. You are required to pre-pay for the shipping and custom charges, if any, required for the shipment of the product to IAdea. The warranties hereby conferred do not extend to any costs associated with the delivery, handling, freighting or transportation of the product and do not extend to any damage or loss occurring during, or associated with, transit.

IAdea currently provides warranty service locations in Taipei, Taiwan and Newark, California, USA.

For questions or further information, please contact support@IAdea.com.